

SUMMARY



Name, date of birth and education: SHARIPBAY Altynbek Amiruly, born on June 16, 1952. In 1974 he graduated from Kazakh State University named after SM. Kirov with a degree in Applied Mathematics, and in 1981 - postgraduate studies at Moscow State University named after M.V. Lomonosov, majoring in "Computer science, computer engineering, systems and networks". In 1989, he completed the annual course "French Language" at the Moscow State Pedagogical Institute M. Torez, and in 1990 - a scientific internship at the University of Paul Valery (France). Speaks Kazakh, Russian, English and French.

Academic degree, title: Candidate of Physical and Mathematical Sciences, Doctor of Technical Sciences and Professor in the group of specialties "Computer Science, Computer Engineering and Control", Academician of the International Academy of Informatization, Academician of the Academy of Pedagogical Sciences of the Republic of Kazakhstan, Laureate of the State Prize of the Republic of Kazakhstan in 2001 in the field of science and technology and education.

Place of employment: 1974-1975 - mathematician-programmer at Kazakh State University named after SM. Kirov. 1975-1981 scientific researcher, post-graduate student of Moscow State University named after M.V. Lomonosov; 1981-1992 - assistant, associate professor, head of the department at the Kazakh State University named after SM. Kirov; 1992-1997 - head of the laboratory of the Institute of Problems of Informatics and Management of the National Academy of Sciences of the Republic of Kazakhstan; 1997-1998 - Head of the Department at the Kazakh State Academy of Management; 1998-2000 - Director of Center for Information Technologies LLP; from 2000 to the present, head of the department, professor of the department "Technology of artificial intelligence", director of the Research Institute "Artificial Intelligence".

Scientific and practical activities: scientific interests: theory of programming, artificial intelligence (*computational linguistics, natural language processing, speech technologies*), e-learning, information security, information security and digitalization of the socio-economic field. Over **500** scientific papers published (Scopus over **53**, H-index **9** and WoS **24**, H-index **6**).

In the field of programming theory, the semantics of production and logical programming languages are formalized, methods for automating the verification of software and hardware are developed. On the basis of these studies, the dissertation "Partial verification of programs in the language of a symbolic processor" was defended for the degree of candidate of physical and mathematical sciences, then a doctoral dissertation "Verification of software and hardware of computers and systems" for the doctor of technical sciences. The obtained scientific results were introduced in 1976 - 1991 in strategic research centers: "Space Systems Simulation Language Translator" at the Flight Test Institute (Zhukovsky), "Digital Circuit Verification System" at the Research and Production Center "Persey" (Zhukovsky).

Zelenograd), “Parallel Programming System for a Multiprocessor Computing Complex” at the International Scientific Center for Electronic Computing (Moscow)

In the field of artificial intelligence, *mathematical and ontological models of the grammar of the Kazakh language were built*, which made it possible to automate the analysis and synthesis of written texts, as well as the recognition and synthesis of Kazakh speech. As a result, a technology was created that allows computer control systems to understand the meaning of commands and make decisions on the meaning of a given order, build a system of text analysis sentiment (https://inbusiness.kz/ru/tv_programs/sandy-azastan-186/zhasandy-intellekt).

In the field of information security and information protection, methods for assessing risks and auditing information security based on non-classical (probabilistic, fuzzy) logic and cryptographic methods based on alternative mathematical (automatic and neural network) models have been developed that allow creating reliable cryptosystems

In the area of digitalization of the socio-economic area. state standards have been developed (Processing of large digital signals and computer recognition of remote sensing, coding of the Kazakh alphabet, development of a control algorithm for an intelligent aircraft control system, terms of reference for the creation of an automated system, Planning for software testing, etc.), and various automated systems have been created (Automated Registrar System of Securities, Automated Depository System of Securities, Automated Accounting System for Utility Payments, Automated System for Election of Deputies, Automated Information Base of the Counting Committee, etc.), which are implemented in the customer organizations of the Republic of Kazakhstan. Also, the "Generator of electronic educational publications", "The system of distance learning of civil servants in the Kazakh language", "Intellectual question-answer system in the Kazakh language", "Intelligent electronic university", "Intellectual system of training, control and assessment of knowledge in the Kazakh language" and more than 60 electronic educational publications in various disciplines of secondary and higher education.

Educational and methodical activity: 11 textbooks (Computer Science, Neural Networks and Theory of Languages and Automata in Kazakh and Russian, Information Security and Information Protection in 3 parts in Kazakh) and 13 textbooks (Mathematics for Computer Science in Russian and English languages, Symbolic processing languages, Programming technology, Relationalik derekter bazasyn kuru men akimshilikteu zhane t.b.), 4 monographs (Proof of the correctness of computer software and hardware, Handbook of securities, Problems of translating Kazakh writing into the Latin alphabet, *Mathematical and ontological models grammar of the Kazakh language*) and 5 terminological dictionaries (Kazakh-Russian, Russian-Kazakh terminological dictionary on informatics and computer technology in 2 editions, Kazakh-Russian, Russian-Kazakh terminological dictionary on information and communication technologies, Spelling dictionary when translating Kazakh writing on latin alphabet), 4 explanatory dictionaries (Scientific-industry explanatory dictionary on computer science and computing technology,

Explanatory dictionary in English, Russian and Kazakh on computer science, Terms and definitions in English, Russian and Kazakh on automated systems, Terms and definitions in English, Russian and Kazakh languages according to a unified system of program documentation), acquired more than 30 copyright certificates and created 9 state compulsory education standards.

Training of scientific personnel: Trained 5 doctors of technical sciences (Baibekov S.N., Boranbaev S.N., Uskenbaeva R.K., Atanov S.K., Kuandykov A.) and 8 candidates of technical sciences in the group of specialties "Informatics, Computer Engineering and management", as well as 10 PhDs in the specialty "Informatics".

International collaborations: The following countries were visited for lectures and scientific reports at the invitation of foreign scientific centers: Bulgaria -1989; France -1990, 1996, 2015; China -1993, 2010, 2014; Germany -1998, 2015; Turkey - 1999, 2008, 2013, 2015; Thailand - 2003, 2015; Israel - 2006; UK - 2006; Malta - 2007, Japan - 2012; Korea - 2013; Italy - 2013, 2018, 2022; Spain - 2014, 2016, 2018; UAE -2016, Austria - 2016; Malaysia - 2017, Portugal - 2017, Poland 2018, Greece 2018.

Awards and grants: 2001 - Laureate of the State Prize of the Republic of Kazakhstan in the field of science, technology and education; 2003 - Medal for merit in the development of science of the Republic of Kazakhstan; 2005, 2010 and 2021 - Grant "The best teacher of the university of the Republic of Kazakhstan"; 2014 - Medal "for the development of the Customs Union"; 2015 - Anniversary medal "20 years of the Constitution of the Republic of Kazakhstan"; 2015 - Medal of L.N. Gumilyov; 2015 - Kultegin Medal.